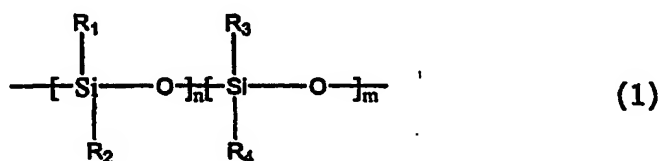


## CLAIMS:

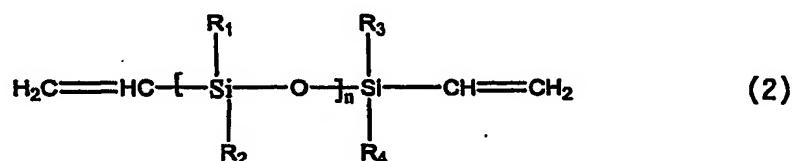
1. A method of manufacturing a replica, which method comprises the provision of a curable resin composition between a mold and a substrate or a blank, carrying out a UV-light initiated or thermal curing treatment and removing the replica thus manufactured from the mold, which replica comprises the substrate and the reproduction of the mold provide thereon, characterized in that, the resin composition used being a silicon based reactive material.

2. A method as claimed in claim 1, characterized in that the resin composition comprises



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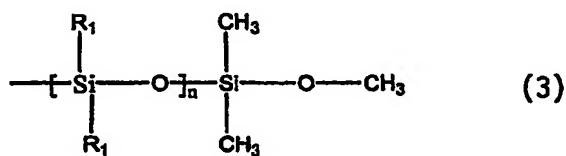
and



wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub> = hydrogen, C<sub>1</sub>-C<sub>10</sub>-alkyl, vinyl, phenyl, hydroxide, amino, halogen atom, and at least one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is hydrogen.

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3. A method as claimed in claim 2, characterized in that the resin composition further comprises

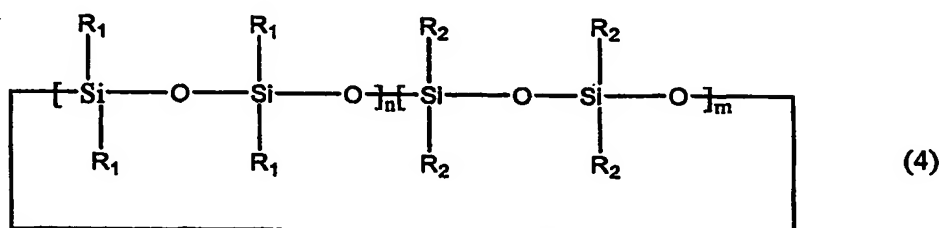


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wherein  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  have the same meaning as disclosed in claim 2.

4. A method according to claims 2-3, characterized in that the resin composition further comprises

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wherein  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  have the same meaning as disclosed in claim 2.

- 10 5. A method according to claims 2-4, characterized in that component (1) is present in an amount of 40-70 wt.%, based on the total weight of the curable resin composition.

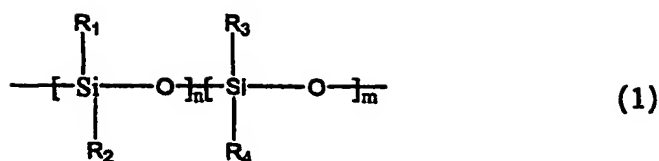
- 15 6. A method according to claims 2-5, characterized in that component (2) is present in an amount of 15-40 wt.%, based on the total weight of the curable resin composition.

- 20 7. A method according to claims 2-6, characterized in that component (3) is present in an amount of 10-30 wt.%, based on the total weight of the curable resin composition.

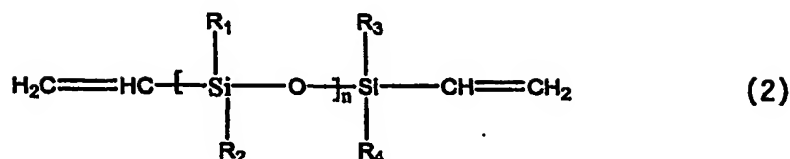
- 25 8. A method according to claims 2-7, characterized in that component (4) is present in an amount of 1.0-5.0 wt.%, based on the total weight of the curable resin composition.

9. A replica obtained by carrying out a UV light-initiated or thermal curing treatment of a mixture comprising a silicon based reactive material.

- 30 10. A replica as claimed in claim 9, characterized in that the silicon based reactive material comprises

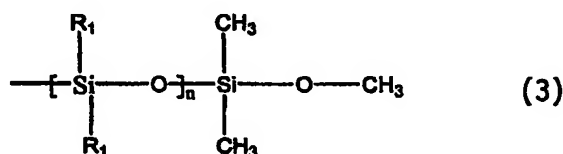


and



- 5                    wherein  $\text{R}_1, \text{R}_2, \text{R}_3, \text{R}_4$  = hydrogen,  $\text{C}_2\text{-C}_{10}$ -alkyl, vinyl, phenyl, hydroxide, amino, halogen atom, and at least one of  $\text{R}_1, \text{R}_2, \text{R}_3$  and  $\text{R}_4$  is hydrogen.

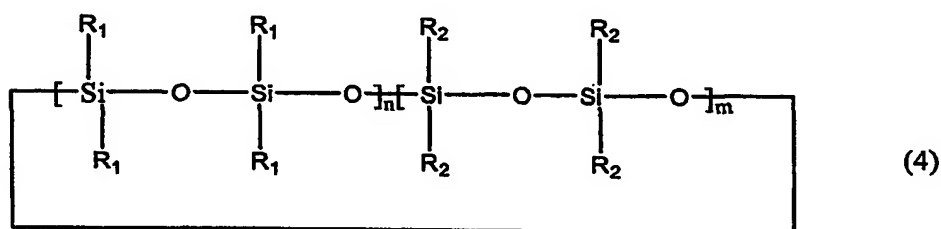
11.                A replica as claimed in claim 10, characterized in that the silicon based reactive material further comprises



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wherein  $\text{R}_1, \text{R}_2, \text{R}_3$  and  $\text{R}_4$  have the same meaning as disclosed in claim 10.

12.                A replica as claimed in claims 10-11, characterized in that the silicon based reactive material further comprises



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wherein  $\text{R}_1, \text{R}_2, \text{R}_3$  and  $\text{R}_4$  have the same meaning as disclosed in claim 10.

13.                A replica as claimed in claims 9-12, characterized in that its transparency is at least 20%, when replicated on a glass material being transparent for the applied wavelength,

measured at a thickness of 100  $\mu\text{m}$ , an intensity of 100  $\mu\text{W}/\text{cm}^2$  and a wavelength of 190-400 nm, during a period of at least 50 hours.

14. A replica as claimed in claims 9-13, characterized in that its transparency is at  
5 least 90 %, when replicated on a glass material being transparent for the applied wavelength, measured at a thickness of 100  $\mu\text{m}$ , an intensity of 0.5 mW/cm<sup>2</sup> and a wavelength of 190-400 nm, during a period of at least 5000 hours.

15. A replica as claimed in claims 9-14, characterized in that it is not birefringent.  
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16. A replica as claimed in claims 9-15, characterized in that the replica obtained is an optical component.

17. A replica as claimed in claim 16, characterized in that the optical component  
15 obtained is an (a) spherical lens, a lens array, a prism, a grating or another relief structure for optical applications, or a combination thereof.